AMENDMENTS TO THE CLAIMS

1 – 27. canceled.

28. (new) A portable respiratory aid system for administrating a regulated flow of air to a person's airway, especially to a person suffering from sleep apnea, the respiratory aid system comprising:

a source of high pressure air;

an air delivery nasal interface, the nasal air delivery interface comprising:

at least one nasal adaptor attachable to a person's nostril, the at least one nasal adaptor comprising an air passage;

at least one Venturi device, the at least one Venturi device comprising a central space, a first and a second open ends, and a first inlet which opens into said central space, wherein the first open end is open to surrounding ambient air and the second open end is in fluid communication with the air passage of said at least one nasal adaptor, and wherein said first inlet is configured for receiving a flow of high pressure gas and for directing said flow of high pressure gas toward said second open end; and

at least one sensor for monitoring breathing of said person;

at least one flexible thin tubing connecting said source of high pressure air and said first inlet of said at least one Venturi device for delivering a flow of high pressure air from said source of high pressure air to said first inlet of said Venturi device; and

a control unit operably connected to said sensor for regulating said flow of high pressure air in accordance with said monitored breathing.

29. (new) The respiratory aid system of claim 28 wherein the thin tubing diameter is in the range of 2 to 5 mm and wherein said source of high pressure air has an output pressure in the range of 2 to 6 Atmospheres.

30. (new) The respiratory aid system of claim 28 wherein said source of high pressure air is a portable container of compressed air.

31. (new) The respiratory aid system of claim 28 wherein said source of high pressure air is an oil-less air compressor.

32. (new) The respiratory aid system of claim 28 wherein said sensor is a sound transducer or a temperature detector.

33. (new) The respiratory aid system of claim 28 wherein said sensor is a pressure detector.

34. (new) The respiratory aid system of claim 28 further comprising a controllable valve operably connected to said control unit, said controllable valve is interposed between said source of high pressure air and said first inlet of the at least one Venturi device.

35. (new) The respiratory aid system of claim 34 wherein said controllable valve is an on/off valve.

36. (new) The respiratory aid system of claim 34 wherein said controllable valve is a flow regulation valve.

37. (new) The respiratory aid system of claim 31 wherein said control unit is operably connected to said oil-less compressor.

38. (new) The respiratory aid system of claim 28 wherein control unit comprises a programmable microprocessor and a memory device adapted for monitoring breathing pattern over time, thereby enabling a long term control of flow of air administrated to the person.

39. (new) The respiratory aid system of claim 28 further comprising a chest-mounted sensor adapted for detecting expansion and contraction a chest of the person.

40. (new) The respiratory aid system of claim 28 wherein the Venturi device further comprises a second inlet which opens into said central space and wherein said second inlet is configured for receiving a flow of high pressure gas and for directing said flow of high pressure gas toward said first open end.

41. (new) An air delivery nasal interface comprising:

at least one nasal adaptor attachable to a person's nostril, the at least one nasal adaptor comprising an air passage;

at least one Venturi device, the at least one Venturi device comprising a central space, a first and a second open ends, and a first inlet which opens into said central space, wherein the first open end is open to surrounding ambient air and the second open end is in fluid communication with said air passage of said at least one nasal adaptor, and wherein said first inlet is configured for receiving a flow of high pressure gas and for directing said flow of high pressure gas toward said second open end; and

at least one sensor for monitoring breathing of a person using the nasal air delivery unit.

42. (new) The air delivery nasal interface of claim 41 wherein said sensor is a sound transducer or a temperature detector.

43. (new) The air delivery nasal interface of claim 41 wherein said sensor is a pressure detector.

44. (new) The air delivery nasal interface of claim 41 further comprising a controllable valve interposed upstream of said first inlet.

45. (new) The air delivery nasal interface of claim 41 wherein the at least one Venturi device further comprises a second inlet which opens into said central space and wherein said second inlet is configured for receiving a flow of high pressure gas and to direct said flow of high pressure gas toward said first open end.

46. (new) The air delivery nasal interface of claim 45 further comprising a controllable valve operably interposed between said first and second inlets, the controllable valve being configured for allowing direction of flow to either said first inlet or to said second inlet.

47. (new) An air delivery nasal interface comprising:

two air delivering units, each for delivering a flow of air to one of a person's nostrils, wherein each of said two air delivery units comprises:

a nasal adaptor attachable to a person's nostril, the nasal adaptor comprising an air passage; and

a Venturi device, the Venturi device comprising a central space, a first and a second open ends, and a first inlet which opens into said central space, wherein the first open end is open to surrounding ambient air and the second open end is connected to the air passage of said nasal adaptor, and wherein said first inlet is configured to receive a flow of high pressure respiratory gas and to direct said flow of high pressure respiratory gas toward said second open end; and

at least one sensor for monitoring breathing of a person using the nasal air delivery unit.

48. (new) The air delivery nasal interface of claim 47 further comprising a common interface inlet in fluid communication with said first inlets of the two air delivering units.

49. (new) The air delivery nasal interface of claim 47 wherein said two air delivery units are pivotally mounted on a flexible elongated connector configured to be placed between mouth and nose.

50. (new) The air delivery nasal interface of claim 47 wherein the Venturi device further comprises a second inlet which opens into said central space and wherein said second inlet is configured for receiving a flow of high pressure gas and for directing said flow of high pressure gas toward said first open end.

51. (new) An air delivery nasal interface comprising:

two Venturi devices pivotally mounted on opposite ends of a flat flexible member configured to be placed between mouth and nose, wherein each of said two Venturi devices comprises:

a hollow member defining a central space, the hollow member is having a first and a second open ends; and

a first inlet which opens into said central space, said first inlet is connectable to a thin tubing;

wherein the first open end is open to surrounding ambient air and the second open end is provided with a nasal adaptor configured to be attached to a person's nostril, and wherein said first inlet is configured to receive a flow of high pressure respiratory gas via said thin tubing and to direct said flow of high pressure respiratory gas toward said second open end.

52. (new) The air delivery nasal interface of claim 51, further comprising a sensor for monitoring breathing.

53. (new) A method for administrating a controlled flow of air to a person suffering from sleep apnea, in accordance with the real-time needs of said person, the method comprising:

connecting a portable source of compressed air by a thin tubing to an inlet port of an air delivery nasal interface wherein the air delivery nasal interface comprises an at least one Venturi device interposed between said inlet port and at least one nasal adaptor configured to be attached to a person's nostril, the at least one Venturi device having a first open end which opens to ambient air and a second open end which opens into an air passage in said nasal adaptor;

monitoring the breathing of said person; and

delivering a flow of compressed air from said source of compressed air via said thin tubing to said air delivery nasal interface; and

regulating said flow of air in accordance with the monitored breathing.

54. (new) The method of claim 50 wherein said source compressed air is a container of high pressure air.

55. (new) The method of claim 50 wherein said source compressed air is an oil-less air compressor.

56. (new) The method of claim 53, wherein said regulating the flow of air in accordance with the monitored breathing comprises the steps of:

turning off the supply of air upon detection of a regular non-obstructive breathing; and

turning on the supply of air upon detection of a breathing disorder.